

Attachment A Data Review Summary Narrative Example

August 5, 2011

Ms. Denise Goddard
United States Environmental Protection Agency
Science and Ecosystem Support Division
980 College Station Road
Athens, GA 30605-2720

Subject: Data Review and Validation Report
Site Name & City/State: Name of Site and location of (both city and state)
Case No.: 41xxx, Project No. 11-0xxx, Work Order No. C11xxxx
ELEMENT Sample I.D. Nos.: C11xxxx-01 - 11
Sampling Date: 07/xx/11
Validated Time of Sample Receipt: 07/xx/11
Laboratory Performing Inorganic Analysis:
Date Received from Lab: 07/xx/11
TDF No.: 11Txxxx

Analyses conducted: Total Metals, Mercury, and Cyanide

Dear Ms. Goddard:

The ESAT Work Team has reviewed the above-captioned CLP data package consisting of eleven soil samples for Total Metals analysis by ICP-AES, mercury, and cyanide according to the contract Statement of Work ISM01.2 and EPA guidelines.

This package presents acceptable contractual and technical performance with qualifications. Additional details are provided below and/ or in the attached review summary form.

Examination of laboratory blank samples revealed apparent low-level contamination with several elements. Reported detection limits were adjusted as high as ten times the blank levels to discount possible false positives due to contamination in laboratory blanks.

ICP-AES Analysis

PE Sample Results

The performance evaluation sample recoveries for metals in soil by ICP-AES were all scored as within limits by the web-based SPS Web software. Therefore, no data qualifiers were applied to sample results for metals based on these criteria.

Other QA/QC Results

Matrix spike recoveries were below control limits for antimony and silver. The results were -32% and 69%, respectively and the post-digestion spike recovery for antimony was -391%. The results for antimony and silver in sample C112122-02 were considered estimated and "J" qualified.

Matrix precision was outside of control limits for antimony (208 RPD), arsenic (38 RPD), and lead (118 RPD). The results for antimony, arsenic, and lead in sample C112122-02 were considered estimated and "J" qualified.

Cyanide Analysis

PE Sample Results

The performance evaluation sample recovery for cyanide in soil was scored as within limits by the web-based SPS Web software. Therefore, no data qualifiers were applied to sample results for cyanide based on these criteria.

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Other QA/QC Results

There were no other QA/QC problems observed for cyanide analysis. Therefore, no data qualifiers were applied to the sample results for cyanide based on these criteria.

Mercury Analysis

PE Sample Results

The performance evaluation sample recoveries for mercury in soil were scored as within limits by the web-based SPS Web software. Therefore, no data qualifiers were applied to sample results for mercury based on these criteria.

Other QA/QC Results

There were no other QA/QC problems observed for mercury analysis. Therefore, no data qualifiers were applied to the sample results for mercury based on these criteria.

A Stage 4 validation consisting of electronic and manual review was performed on the inorganic samples submitted for this case. Further details are provided in the attached review summary form. Please feel free to contact this office if we can be of further service.

Very truly yours,

Approved:

Sr. Inorganic Data Reviewer
Integrated Laboratory Systems

Region 4 ESAT Team Manager
Integrated Laboratory Systems

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TIME TRACKER

VERSION 4.1

CASE # :	41551	PROJECT #:	11-0572	TDF NO:	11T1666
LAB METHOD(S):	EPA SOW ISM01.02		LIMS METHOD CODE(S):	I100	
NUMBER OF SAMPLES:	11	VALIDATED TIME OF SAMPLE RECEIPT (VTSR):	07/08/11	DUE DATE:	08/10/11
SITE NAME:	Ninety Six Cotton Mill, Ninety Six, SC			SITE ID:	Z266
PROGRAM:	SUPE	TASK ORDER: E123-029-42	Work Order:	C112907	Box 11-108
STAGE OR PERSON		INITIALS	DATE ACCEPTED	COMPLETION DATE	# Hours
1.	Received by EPA QAS		07/27/11		
2.	Evidentiary Audit	TM	07/28/11	07/28/11	2.5
3.	Data Reviewer/Spreadsheet Data Entry	SJ	08/04/11	08/05/11	6.5
4.	Secondary Review/Spreadsheet Verification				
5.	Final Overview (memo, entry, content)				
6.	Element Import				
7.	Task Monitor (Overview /data distribution)				

Sample and Method Information

EPA Samples # (Separated by methods for cases with multiple lab methods applied)	V	SV	Pest./PCBs	PCDD/PCDF	Metals		CN	OTHERS (specified) Hg
					ICP/AES	ICP/MS		
C112907-01 – 09, -10 (PES)					X		X	X
C112907-11 (PES)					X			X

Notes/Comments:

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Attachment B – Data Review Time Tracker Example

TIME TRACKER										
VERSION 4.1										
CASE # :	41xxx	PROJECT #:	11-0xxx	TDF NO:	11Txxxx					
LAB METHOD(S):	EPA SOW ISM01.02		LIMS METHOD CODE(S):		I100					
NUMBER OF SAMPLES:	11	VALIDATED TIME OF SAMPLE RECEIPT (VTSR):	06/xx/11	DUE DATE:	07/xx/11					
SITE NAME:	Name of site/facility and city/state						SITE ID:			
PROGRAM:	SUPE	TASK ORDER: Exxx-xxx-xx	Work Order:	C11xxxx	Box 11-xxx					
STAGE OR PERSON		INITIALS	DATE ACCEPTED	COMPLETION DATE	# Hours					
1.	Received by EPA QAS		07/xx/11							
2.	Evidentiary Audit	TM	07/xx/11	07/xx/11	2.5					
3.	Data Reviewer/Spreadsheet Data Entry	SJ	07/xx/11	07/xx/11	8.5					
4.	Secondary Review/Spreadsheet Verification	SS	07/xx/11	07/xx/11						
5.	Final Overview (memo, entry, content)	MEK	07/xx/11	07/xx/11						
6.	Element Import	TM	07/xx/11	07/xx/11						
7.	Task Monitor (Overview /data distribution)									
Sample and Method Information										
EPA Samples # (Separated by methods for cases with multiple lab methods applied)	V	SV	Pest./PCBs	PCDD/PCDF	Metals		CN	OTHERS (specified)		
					ICP/AES	ICP/MS		Hg		
C11xxxx-01 – 14, 15 (PES)					X			X		
C11xxxx-16 (PES)					X					
Notes/Comments:										

Attachment C Data Review Summary Narrative (Manual Review) Non-CLP Inorganic Project

April 8, 2011

Ms. Denise Goddard
United States Environmental Protection Agency
Science and Ecosystem Support Division
980 College Station Road
Athens, GA 30605-2720

Subject: Data Review and Validation Report
Site Name:
Case No.: NA, Project No. 11-0xxx, Work Order No. C11xxxx
ELEMENT Sample ID. Nos.: C11xxxx-01 - 08
Sampling Dates: 11/02 - 03/2010
Inorganic Analysis: Date Received from Lab: 04/04/11
TDF No.: 11Txxxx
Analyses conducted: Particle Size Distribution

Dear Ms. Goddard:

The ESAT Work Team has reviewed the above-captioned data package consisting of eight soil samples for Particle Size Distribution (PSD) according to EPA guidelines. This package presents acceptable contractual and technical performance. Further details are provided below and in the attached review summary form.

EAB Particle Size Distribution, Wet Sieve Technique-Gravimetric

There was no data for a blank analysis as prescribed in the methodology. No data qualifiers were applied.

It is noted that % Clay, Silt, and Sand are provided on an “as is” basis, while the % of the various particle sizes in millimeters are provided on a dry sample basis.

A validation equivalent to manual stage 2A was performed on all verified samples in this document. Sample data was manually entered into Excel/Element format.

Further details are provided in the attached review summary form. Please feel free to contact this office if we can be of further service.

Very truly yours,

Approved:

Sr. Inorganic Data Reviewer
Integrated Laboratory Systems

Region 4 ESAT Team Manager
Integrated Laboratory Systems

Attachment D Data Review Assessment Report (Manual Review) Example

Inorganic Data Quality Assessment Record (DQAR)

Review Date:	07/29/11	Analyses:	TOC & Particle Size	Matrix:	Water & Soil	Project #:	DG-0xxx	
SDG /Lab File:	3xxxxxx, 3xxxxxx, 3xxxxxx, 3xxxxxx, 3xxxxxx, 3xxxxxx							
Laboratory	Name of Laboratory							
Site Name:	Name of Site – City/State							
Check One:	EPA		ESAT		CLP		Other (specify) Non-CLP (RAS)	

Signatures: SJ

Reviewer

Review Codes: M- Metals, H- Mercury, C- Cyanide, O- Others

Sample Numbers:

Water:	Soil/Sediment:
SMSSW01 – SMSSW10	SMSSD01 SMSSFC13
SMSSW04D	SMSSD03 – 10 SMSSFJ04
SMSSW08SPRING	SMSSD04D SMSSFL04
SMSSW09SPRING	SMSSBJ10-17.5 – 23 SMSSFI04
	SMSSBJ09-10 – 15 SMSSFM06
	SMSSBJ08-13 – 17 SMSSFM04
	SMSGWJ08-21 SMSSBJ07
	SMSSFF15
	SMSSFE15
	SMSSFH05
	SMSSFH95
	SMSSFE13

I. SUMMARY OF PROBLEMS AND COMMENTS:

A summary of deficiencies noted for the methods used to generate data for this project is presented below. Please refer to the Data Quality Assessment Record (DQAR) for each data file and the data flag summary table at the end of this review document. For the purposes of this review, the QC limits specified in the analytical method have been applied to the data. Data qualifier recommendations are made in accordance with the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (Functional Guidelines), and the Region 4 SOP, Data Validation Standard Operating Procedures for Contract Laboratory Program Routine Analytical Services (R4DVSOP).

Data Review Comments:

- Matrix spike recoveries were low for FI, NO2, PO4, SO4, TKN in sample SMSSD08.
- Matrix precision was over control limits for NO2 in sample SMSSD08.
- Holding times were missed for dilutions for NO3 and NO2 in sample SMSGWJ08.

II. Data Quality Assessment (An explanation for any "no" answer must be provided)		Yes	N/A	No
1.	Summary	Yes	N/A	No
	Were all requested analyses performed?	O	M,H	
	Were all required QC checks performed?	O	M,H	
	Were all required documents present?	O	M,H	
	Were requested detection limits met?	?		

Remark: Required detection limits are unknown.

2.	Holding Times:(Holding times are not applicable for non-aqueous samples)	Yes	N/A	No
	Were water samples properly preserved?	O	M,H	
	Were water holding time requirements met?		M,H	O
	Remark: Holding times were missed for dilutions for NO3 and NO2 in sample SMSGWJ08.			

Attachment D Data Review Assessment Report (Manual Review) Example

3.	Calibrations:		Yes	N/A	No
	A. Initial Calibration:				
	Were acceptable correlation coefficients obtained?		O	M,H	
	Were acceptable % Recoveries for analytes obtained?		O	M,H	
	B. Continuing Calibration				
	Were acceptable % Recoveries for analytes obtained?		O	M,H	
	Remark:				
4.	Blanks:		Yes	N/A	No
	Were any contaminants noted in the blanks?		O	M,H	
	If yes, were blank rules applied to the data?		O	M,H	
	Remark: 10X rule applied				
5.	ICP Interference Check Sample:		Yes	N/A	No
	Were results within 20% of the true value?			M,H,O	
	Were False positives Reported?			M,H,O	
	Were False negatives reported?			M,H,O	
	Remark:				
6.	Matrix spikes:		Yes	N/A	No
	Was a matrix spike analysis performed?		O	M,H	
	Were samples spiked at appropriate levels?		O	M,H	
	Were matrix spike/matrix spike duplicate analyses performed?		O	M,H	
	Were acceptable recoveries obtained?			M,H	O
	Was acceptable precision obtained?			M,H	O
	Remark: MS recovery low for FI, NO2, PO4, SO4, and TKN. RPD high for NO2.				
7.	Matrix duplicate analysis:		Yes	N/A	No
	Was a matrix duplicate analysis performed?		O	M,H	
	Was duplicate precision in control?				O
	Remark: RPD outside of control limits for TOC and NO2 in field duplicates.				
8.	Performance Evaluation Sample:		Yes	N/A	No
	Was a P.E. Sample analyzed with the samples?			M,H	O
	If yes, were acceptable results obtained?				
	Remark:				
9.	Method Standard / Laboratory Control Sample:		Yes	N/A	No
	Were acceptable recoveries obtained?		O	M,H	
	Was acceptable precision obtained?		O	M,H	
	Remark:				
10.	ICP Serial Dilution Sample:		Yes	N/A	No
	Was ICP serial dilution analysis performed?			M,H,O	
	Were diluted results within 10% of undiluted sample result?				

Attachment D Data Review Assessment Report (Manual Review) Example

	Remark:				
11.	Completeness:		Yes	N/A	No
	Were all requested analyses performed?		O	M,H	
	Were all required documents present? If yes, were results provided?		O	M,H	
	Were results of calculation checks acceptable?		O	M,H	
	Remark:				

Attachment D Data Review Assessment Report (Manual Review) Example

Additional Comments:

III. Data Qualifiers Summary

Based on a review of the quality control information, the following is a table summarizing the data qualifiers used by Region IV for this data review report.

Recommended Data Qualifiers					
Case	NA	Project Number:	DG-0xxx	ELEMENT Sample ID Nos.	NA
Site	Name of Site – City/State		Date:	07/29/11	
Affected Samples	Analytes	Recommended Qualifiers		Reason	
SMSSD08	FI, NO2, PO4, SO4, TKN	J, QM-1		Low MS recovery	
SMSSD08	NO2	J, QM-4		High RPD	
SMSGWJ08	NO3 and NO2	J, H-1		Holding times missed for dilution.	
SMSSD08	PO4	R, QM-6		MS recovery < 10%	

Attachment E – Record Transfer Inventory Form Region 4 Example

RECORD TRANSFER INVENTORY FORM EPA REGION 4									
Date:		08/26/11							
Division:		Science and Ecosystem Support				Section:			
Branch:		Quality Assurance Section				Unit:			
Name of Contact Person:			Name of Person			Phone #:		706-xxx-xxxx	
						VMX:			
BOX	108	OF		EPA Series No.	0xx-A	Year of Records:		2011	
Series Titles:		Sampling and Analytical Data Files, Superfund Site-specific							
FOR RRP USE ONLY									
Disposition Schedule #:						Data Rec'd/Entered:			
Location:						Accession #:			
DESCRIPTION OF CONTENTS									
Case No.	Project No.	Lab Name			Site		Type	Note	
41xxx	11-0xxx	XYZ Laboratory			Name of Site		CLP	Inorganic	
41xxx	11-0xxx	XYZ Laboratory			Name of Site		CLP	Inorganic	
	DG-0xxx						Non CLP	Inorganic	
41xxx	11-0xxx	XYZ Laboratory			Name of Site		CLP	Inorganic	
41xxx	11-0xxx	XYZ Laboratory			Name of Site		CLP	Inorganic	